

## ABSTRACT OF THE DISCLOSURE

A portable reactor container that contains a removable fire grate enclosure and an incline on its floor that slopes to a discharge port. Heating elements are arranged between the enclosure and the container. A heat recovery section, which may be a water reservoir, surrounds the outside of the container to convert water into steam by absorbing heat leaving the container. The enclosure may be inserted into or removed from the container with a forklift. Wood waste or other wood waste material may be filled into the fire grate enclosure to be transformed into wood charcoal by heating appropriately while the container is hermetically sealed.